

## **Methods and Apparatus for Backup and Restoring Systems**

### **ABSTRACT OF THE DISCLOSURE**

The present invention provides techniques for managing storage based replication. Specific embodiments provide techniques for performing system backup and restoring. In specific embodiments, benefits such as keeping a remote mirror between a primary volume and a secondary volume in operation can be provided. Since the remote mirror is usually used for disaster recovery purposes, where the mirrors must be always in-sync state, being able to take a backup without breaking the remote mirror can help provide a constant duplicate copy of production information in case of emergency, for example. Further, in some embodiments, a user can take backups of more than one generation by setting up two or more secondary volumes (SVOLs) for one primary volume (PVOL).